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10/688,116	10/17/2003	Dino Montagner	1719-71	9243

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EXAMINER

KUMAR, PREETI

ART UNIT	PAPER NUMBER
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1751

DATE MAILED: 12/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/688,116

Applicant(s)

MONTAGNER, DINO

Examiner

Preeti Kumar

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>3/19/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Non-Final Rejection

1. Claims 1-17 are pending.
2. Claim 1 is independent.

Claim Objections

3. Claims 3 –7, 9-17 are objected to because of the following informalities:

Claim 3 does not make grammatical sense. Examiner suggests review of the adjectives (untreated, degummed, raw) describing the silk as well as deleting “is required in”.

Claim 7 is reciting a temperature of 30 degrees without any Celsius or Fahrenheit units. Also applicants use the abbreviated form of approximately.

Furthermore, claims 3-7 and 9-17 capitalize Claim 1 in the middle of the sentence. This is not proper sentence construction. Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1, 8 and 16-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 is indefinite because it fails to particularly point out whether the limitation to coloring the manufactured article “as required” is part of the instant claim or if it is optional. Also the steps of making the manufactured article and immersing the

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manufactured article does not make sense. What are the method steps in the stage of "making the manufactured article"? Examiner has interpreted this claim to mean *selecting an article comprised of fabric selected from the group consisting of a piece or reel or article of clothing or portion of an article of clothing, and immersing the article in a bath.*

Claim 8 is indefinite because the term "overall-type" in claim 8, line 2 is a relative term, which renders the claim indefinite. The term "overall-type" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. (See *Ex parte Copenhaver*, 109 USPQ 118 (Bd. App. 1955)).

Specifically regarding claims 16-17, these claims fail to point out what is included or excluded by the claim language. They are omnibus type claims which are indefinite because the limitation to **"a manufactured article substantially as described herein and with reference to the drawings"** as recited by the instant claims does not make clear or define the boundaries of the subject matter for which patent protection is sought.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

8. Claims 1, 2, 5-6, 10-17 rejected under 35 U.S.C. 102(b) as anticipated by Elfersy et al. (US 6,120,587).

Elfersy et al. teach 3-(trimethoxysilyl)propyl-dimethyloctadecyl ammonium chloride as surface bonding antimicrobial agents. Regarding claims 10-15, Elfersy et al. teach surfaces and substrates treatable with the antimicrobial agents include, but are not limited to, textiles, carpet, carpet backing, upholstery, clothing, sponges, plastics, metals, surgical dressings, masonry, silica, sand, alumina, aluminum chlorohydrate, titanium dioxide, calcium carbonate, wood, glass beads, containers, tiles, floors, curtains, marine products, tents, backpacks, roofing, siding, fencing, trim, insulation, wall-board, trash receptacles, outdoor gear, water purification systems, and soil. Furthermore, articles treatable with the antimicrobial agents include, but are not limited

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to, air filters and materials used for the manufacture thereof, aquarium filters, buffer pads, fiberfill for upholstery, fiberglass duct-board, underwear and outerwear apparel, polyurethane and polyethylene foam, sand bags, tarpaulins, sails, ropes, shoes, socks, towels, disposal wipes, hosiery and intimate apparel; cosmetics, lotions, creams, ointments, disinfectant sanitizers, wood preservatives, plastics, adhesives, paints, pulp, paper, cooling water, and laundry additives and non-food or food contacting surfaces in general. See col.20,ln.45-67.

In col.21, Elfersy et al. teach a process of treating the aforementioned surfaces with a water-stabilized organosilane solution, for a period of time sufficient for permanent bonding of the active organosilane ingredient (or portion thereof) to the article. Elfersy et al. teach that treatment begins almost immediately upon contact, but preferably requires from about 15 seconds to about 1 hour. Elfersy et al. teach dipping a large object, for 1-2 minutes of submersion in the solution and then the object is permitted to dry or is dried. Elfersy et al. teach also teach a method of dyeing the treated substrate. See col.3,ln.60-65. Elfersy et al. teach that one of ordinary skill in the art would recognize that numerous other uses and modes of application are readily apparent from the stabilized organosilane compounds, products and compositions of the present invention and would, without undue experimentation, be able to determine effective application methods and treating times for any particular substrate, article, or other application. In addition, the compositions can be used in padding processes as are known in textile mills. See col.21,ln.15-35.

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In example 3, Elfersy et al. teach the incorporation of an organosiloxane antimicrobial agent, namely, the claimed 3-(trimethoxysilyl)propyldimethyloctadecyl ammonium chloride in an aqueous solution with 3-chloropropyltrimethoxysilane catalyst for use in most textile goods for imparting antimicrobial properties. See example 3 and col.24-25. Accordingly the teachings of Elfersy et al anticipate the material limitations of the instant claims.

9. Claims 3-4, 8-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Elfersy et al. (US 6,120,587).

Elfersy et al. are relied upon as set forth above.

However, Elfersy et al. do not teach a process of producing a silk product as claimed by the instant claims 3-4 and further do not teach a silk product as claimed by instant claims 8-9.

It would have been obvious to one of ordinary skill, at the time the invention was made to arrive at a process of producing a manufactured silk article as recited by the instant claims 3-4, with a reasonable expectation of success and similar results because the teachings of Elfersy et al. suggests a process of treating a variety of garments and intimate apparel with the claimed 3-(trimethoxysilyl)propyldimethyloctadecyl ammonium chloride antimicrobial in an aqueous solution with 3-chloropropyltrimethoxysilane catalyst, and furthermore it is known in the art, that intimate apparel encompass silk in general.

It would have been obvious to one of ordinary skill, at the time the invention was made to arrive at the manufactured silk article as recited by the instant claims 8-9, with a reasonable expectation of success and similar results because the teachings of

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Elfersy et al. suggests intimate apparel articles which is known in the art to encompass silk in general.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Elfersy et al. (US 6,120,587) as set forth in claims 1-6,8-17 above and further in view of Peterson et al. (US 6,613,755).

Elfersy et al. are relied upon as set forth above.

However, Elfersy et al. do not teach the process of immersing an article in a solution at the claimed pH and temperature as recited by instant claim 7.

Peterson et al. teach that it is well known to those skilled in the art that adjustment of the pH with acids or bases or the addition of certain surfactants will increase or decrease the rate of self-condensation. Specifically Peterson et al. illustrate in example 11 a liquid antimicrobial containing 3-(trimethoxysilyl)propyl-dimethyloctadecyl ammonium chloride with a pH of 5.5-6.5 at room temperature is heated to about 60C for about 30 minutes. See col.17, example 11 and col.12.ln.1-5.

Thus, it would have been obvious to one of ordinary skill, at the time the invention was made to arrive at a method of heating the medical articles containing the antimicrobial agent to result in the claimed pH as recited by the instant claim, with a reasonable expectation of success and similar results because Elfersy et al. in view of Peterson et al. teach a liquid antimicrobial containing 3-(trimethoxysilyl)propyl-dimethyloctadecyl ammonium chloride with a pH of 5.5-6.5 at room temperature is heated to about 60C for about 30 minutes and thus would be expected to have similar pH properties as recited by the instant claims in general. One of ordinary skill in the art

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would have been motivated to combine the teachings of Elfersy et al. with that of Peterson et al. because both teach the analogous use of 3-(trimethoxysilyl)propyl-dimethyloctadecyl ammonium chloride as an antimicrobial agent in general.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Remaining references cited but not relied upon are considered to be cumulative to or less pertinent than those relied upon or discussed above.

Applicant is reminded that any evidence to be presented in accordance with 37 CFR 1.131 or 1.132 should be submitted before final rejection in order to be considered timely.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Preeti Kumar whose telephone number is 571-272-1320. The examiner can normally be reached on M-F 9:00am - 5:30pm.

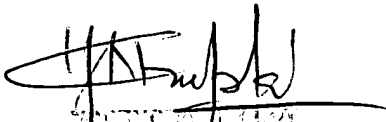
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yogendra N. Gupta can be reached on 571-272-1316. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Preeti Kumar
Examiner
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PK.



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